

Vogel

Time Line:

- 1971-1979 – Vogel obtained approval to dispose of waste on the site from IDNR
- 1979 – IDNR received complaints of Vogel disposal 1.5 mile north of the city of Maurice well field
- 6/1984 – **Listed on NPL**
- 6/1987 – RI/FS under IDNR Consent Order
- 9/1989 – **ROD signed by IDNR and EPA**
 - The selected remedy is Alternative S-3 involving on-site bioremediation of soils coupled with Alternative GW-1 involving pumping and air stripping of groundwater.
 - Continued listing and restrictions associated with the State Abandoned or Uncontrolled Sites Registry until no further threat remains.
 - Continued floating hydrocarbon removal until no appreciable amounts can be recovered.
 - Removal of the uncontaminated cover soil and temporary storage of the material in a protected area.
 - Removal of solid waste material, other than contaminated soil (e.g., drums, paint cans, wooden pallets, paint solids, general trash), from the disposal trenches and temporary storage in a protected area.
 - Ultimate disposal of the solid waste material in a municipal landfill if the material is non-hazardous or can be made nonhazardous through decontamination. Ultimate disposal in a hazardous waste landfill, or off-site incineration of this material may be warranted if the material is hazardous and cannot be made non-hazardous.
 - Removal of free solvent liquids from the excavation and temporary storage in tanks, and off-site recycling of the solvent, if possible, or off-site incineration.
 - For "clean closure" soils must pass the EP Toxicity test for leachable metals (40 CFR 261.24), the TCLP test for leachable organics (40 CFR 268.41) and shall not contain more than 100 mg/kg of Total Organic Hydrocarbons prior to final placement.
 - An air monitoring program approved by the DNR will be implemented during all site work.
 - Dust control will be provided during excavation.
- 1990 – **MOU between IDNR and EPA for RA/RD**
- 6/1994 – **ESD**. Says EPA concurs but no signature page (necessary?).
 - Increased recovery wells for P&T from 1 to 5.
 - Add free product recovery
 - Increased area of soil remediation
- 8/1994 – EPA signed a preliminary close out report for soil (Michael Sanders)
- 11/1997 – **Consent Decree between Vogel/EPA**
 - 6. Further Response Action.
 - a. Settling Defendant shall comply with all orders or consent agreements issued after, the date of lodging of this Consent Decree by the State of Iowa relating to the Site together with all amendments or modifications thereto not inconsistent with CERCLA and the NCP. Settling Defendant shall implement and perform all

response actions developed in accordance with such orders or consent agreements, statements of work, work plans, and schedules developed by or with the State of Iowa.

- b. If EPA determines that response actions to be performed by Settling Defendant pursuant to orders or consent agreements issued after the date of lodging of this Consent Decree by the State of Iowa relating to the Site are insufficient to carry out and maintain the effectiveness of a remedy set forth in any ROD, ESD, or action memorandum issued for the Site, EPA may require that Settling Defendant perform further response actions in accordance with CERCLA and the NCP and not inconsistent with the orders or consent agreements issued by the State. Settling Defendant shall undertake such further response actions.
 - 8. c. If Settling Defendant does not comply with Section XI (Site Access), Section XII (Access to Information), Section XIII (Retention of Records), or Section XIV (Notices and Submissions), Settling Defendant shall pay to EPA, as a stipulated penalty, \$500 per violation per day of such noncompliance.
 - XI.22 - Commencing upon the date of lodging of this Consent Decree, Settling Defendant agrees to provide the United States and its representatives, including EPA and its contractors, access at all reasonable times to the Site and to any other property owned or controlled by Settling Defendant to which access is reasonably determined by EPA to be required for the implementation of this Consent Decree, or for the purpose of conducting any response activity related to the Site, including but not limited to:
 - g. Assessing Settling Defendant's compliance with this Consent Decree.
- 9/2000 – Remedial Action Report on Soil
- 10/2000 – **ESD**. Says EPA concurs but no signature page (necessary?). Found separate letter saying we agreed.
 - Enhanced free produce recovery/Bioventing of soil/Updated MCLs to current protective statewide standards for Iowa (ARARs)/Establish property boundary as point of compliance for ARARs/ Revisions will include criteria to determine if and when discontinuation of active groundwater remediation (i.e. the ongoing pump and treat) is warranted. The criteria will include:
 - no exceedance of chemical specific ARARs at the property boundaries – happened in 2004
 - no expansion to groundwater contamination as demonstrated by stable or decreasing groundwater contaminant levels throughout the site and – happened in 2004
 - no other evidence that suggests the potential for migration of groundwater from the site at levels in excess of chemical specific ARARs. – happened in 2004
- 2003 **Consent Order with IDNR and Vogel.**
 - Updated the ROD with ESDs and provided language for when the pump & treat system could be shut down and conditions when it would be turned back on. Groundwater P&T was to stay in standby mode as long as these happened:
 - no exceedance of chemical specific ARARs at the property boundaries – happened in 2004
 - no expansion to groundwater contamination as demonstrated by stable or decreasing groundwater contaminant levels throughout the site and – happened in 2004

- no other evidence that suggests the potential for migration of groundwater from the site at levels in excess of chemical specific ARARs. – happened in 2004
- Summer 2003 – P&T system not turned back on as usual for seasonal pumping until August, after July sampling showed contamination above MCL at site boundary.
- 2/2004 – IDNR acknowledges that contamination has migrated off site due to shut down of pump & treat system. System turned back on seasonally.
- 9/2004 – Second Five Year Review – Need to fix off site migration (Cover letter signed by EPA)
- **June 2005 – IDNR says the system has to be shut off to evaluate off site migration. Gives Vogel a variance for the 2003 Consent Order. No decision document to support this in the file**
- Aug 2005 – EPA sends letter to IDNR, says:
 - General Comment - EPA believes that offsite migration of groundwater contaminants will continue without the implementation of a remedial/containment program due to the presence of onsite contamination and it must be recognized that the 2003 Consent Order between Iowa DNR and Vogel anticipates operation of a groundwater remediation system in the event groundwater concentrations are migrating offsite at concentrations that exceed statewide standards. However, EPA does not disagree with the proposed monitoring without the groundwater remediation system in operation to help determine if offsite groundwater concentrations are the result of a slug of contamination versus a more continuous migration from onsite sources. However, as recognized in the June 20th letter, the groundwater plume could expand absent the operation of the pump and treat system and require additional remedial efforts in offsite areas.
- Sep 2005 – IDNR sends Vogel a letter saying they are within compliance with the Consent Order even though they have not turned the P&T system back on. Outlines plans on how to close site or continue sampling if necessary.
- 2007 – Vogel submits an offsite migration evaluation with alternative RAs
- 4/2007 – EPA review of 2006 annual report. EPA says in cover letter:
 - Based on this information, EPA concurs with the recommendation to review potential remedial options to reduce the impact on the neighboring property to the south. This effort should consider the possibility of placing the groundwater remediation system (i.e., pump and treat) back into operation or modifying the existing pump and treat system to more effectively address the contamination at the southern property boundary.
- 6/2007 – Phyto proposed
- 7/2007 – IDNR approve phyto pilot study with irrigation of plume to water (Letter) – **NO DECISION DOCUMENT IN FILE TO SUPPORT THIS CHANGE**
- 4/2008 – EPA sends IDNR an e-mail questioning a lack of ROD amendment for phyto.
- 5/2009 – EPA sends IDNR an e-mail with link to post ROD changes guidance for CERCLA sites saying an ESD or ROD amendment is necessary for phyto.
- 9/2009 – Third Five Year Review
- 9/2014 - Fourth Five Year Review